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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,135	12/05/2003	Edmund O. Schweitzer III	SEL#105/231-253	8972
7590 03/30/2004 Jensen & Puntigam, P.S. Suite 1020 2033 Sixth Avenue Seattle, WA 98121			EXAMINER RAYMOND, EDWARD	
			ART UNIT 2857	PAPER NUMBER

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. 

10/729,135

Applicant(s)

SCHWEITZER ET AL.

Examiner

Edward Raymond

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-16** are rejected under 35 U.S.C. 102(e) as being anticipated by Hart. Hart teaches a protective relay using (Claims 1 and 5: see col. 7, lines 36-49), comprising an acquisition circuit for obtaining at least one of the following voltage values and current values, from an electric power system (Claims 1 and 5: see col. 7, lines 51-57); a sampling circuit for sampling the voltage or current values at selected intervals of time, wherein the sampling is based an absolute time reference (Claims 1 and 5: see col. 9, lines 1-11 and 63-65); and a communication system transmitting messages containing synchronized phasor values from said protective relay a host device (Claims 1 and 5: see col. 10, lines 54-65).

Hart teaches a relay wherein the absolute time reference is provided by a global positioning system (Claims 2, 6, and 14: see Figure 2: GPS Receiver 175 and col. 17, lines 42-46).

Hart teaches a relay wherein sampling frequency is independent of power system frequency (Claims 3, 7, and 15: see col. 10, lines 19-25: The Examiner notes

that the the harmonic frequency of each phasor module is independent of the power system frequency).

Hart teaches a relay wherein the acquisition circuits and the sampling circuit use both voltage and current values (Claims 4, 8, and 16: see col. 4-15).

Hart teaches a protective relay using synchronized phasor measurements for protection of electric power systems (Claim 5: see col. 17, lines 42-55), comprising an acquisition circuit for obtaining at least one of the following voltage values and current values, from the power system (Claim 5: see col. 7, lines 51-57); a sampling circuit for sampling the voltage or current values at selected intervals of time, wherein the sampling is based on an absolute time reference (Claim 5: see col. 9, lines 1-11 and 63-65); and a calculation system using said sampled signals produce synchronized voltage or current phasor values and then using said synchronized voltage current phasor values perform selected protection functions for the power system (Claim 14: see col. 14, lines 21-40).

Hart teaches a relay wherein the calculation system responsive to voltage or current values from said protective relay and from another relay which is remote from said protective relay to perform selected protection functions for the power system involving the protective relay and said another relay (Claim 9: see col. 10, lines 2-12).

Hart teaches a relay including communication means for transmitting messages containing synchronized phasor values from said protective relay host computer, wherein the messages contain an absolute time reference indication (Claim 10: see col. 10, lines 54-65 and col. 9, lines 63-65).

Hart teaches a relay wherein the relay includes a communication circuit responsive to a request from the host computer to report the synchronized phasor values of voltages and currents present on the power system at specified times (Claim 11: see col. 10, lines 54-65 and col. 9, lines 63-65), wherein the synchronized phasor values from a plurality of protective relays the power system are used by the host computer to provide an indication of the operating condition of the power system at said specified times (Claim 11: see col. 9, lines 63-65 and col. 7, lines 36-49).

Hart teaches a relay wherein the calculation system uses the absolute time reference information from a remote relay in the power system to align data, including both magnitude and angle, from the local and remote sources thereof, and further uses the aligned magnitude and angle information to perform the protection and/or control functions (Claim 12: see col. 17, lines 42-67).

Hart teaches a protective relay using synchronized phasor measurements for protection of electric power systems (Claim 13: see col. 17, lines 42-55), comprising an acquisition circuit for obtaining at least one of the following voltage values and current values, from the power system (Claim 13: see col. 7, lines 51-57); sampling circuit for sampling the voltage or current values at selected intervals of time, wherein the sampling is based on an absolute time reference (Claim 13: see col. 9, lines 1-11 and 63-65); and calculation system using said sampled signals to produce synchronized voltage or current phasor values and then using said synchronized voltage current phasor values perform selected protection functions for the power system (Claim 13: see col. 14, lines 21-40), wherein the relay includes receiving circuit for receiving

voltage current values from another relay which is remote from said protective relay (Claim 13: see col. 15, lines 27-50) and wherein the calculation system is responsive to the voltage or current values from said protective relay and from said another relay to perform selected protection functions for the power system involving the protective relay and said another relay (Claim 13: see col. 59-63).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yalla teaches a method and system for providing protective relay functions. Yalla et al. also teach a multifunction protective relay system. Kinney et al. teach a distributed current and voltage sampling function for an electric power-monitoring unit. Janke et al. teach a system for calibrating a line isolation monitor. Granville et al. teach a power transmission line monitoring system. Fernandes teaches electrical power line monitoring systems, including harmonic value measurements and relaying communications.

### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on Monday through alternating Friday between 8:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for

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the organization where this application or proceeding is assigned are 571-273-2221 for regular communications and 571-272-1562 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read "Edward Raymond". The signature is fluid and cursive, with the first name "Edward" and last name "Raymond" clearly distinguishable.

March 19, 2004  
Edward Raymond  
Patent Examiner  
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